

ENGINEERED PERFORMANCE STANDARDS

BOOK NUMBER - 08

MOVING AND RIGGING



<u>CHAPTER</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
010	CRANE OPERATIONS - Material and Equipment.	1
020	CRANE OPERATIONS - Heating, Ventilating, Air Conditioning Items, Artillery Targets.	5
030	CRANE OPERATIONS - Communication Tower Antennas.	7
040	CRANE OPERATIONS - Marine Rigging.	8
050	CRANE OPERATIONS - Tugboat and Docking Equipment	10
060	FURNITURE MOVING - Minor and major items	13
070	REEVING - Cables.	16
080	SCAFFOLDING - Assemble and Disassemble.	18
090	SHOP OPERATIONS -	20
100	WEIGHT CAPACITY TESTING - Cranes, forklift trucks.	22
110	DRIVE-ON TRAILER LOADING/UNLOADING - Folding gooseneck	24
120	BACKHOE OPERATIONS - Concrete street barriers	25

EPS SUPPLEMENTAL DATA
CRAFT DELAY ALLOWANCE, JOB PREPARATION

CRAFT	JOB PREP	CRAFT DELAY SINGLE	ALLOW. MULTI
BOILER WORK	.4	23	33
CARPENTRY - GENERAL	.3	15	20
CARPENTRY - ROOFING	.6	20	25
COOLING/VENT/REFER.	.3	15	18
ELECTRICAL & ELECTRONIC	.3	16	20
HAZARDOUS WORK (ADD TO JP)	.2	--	--
HEATING	.3	17	21
JANITORIAL	.3	11	13
MACHINE SHOP	.3	23	24
MACHINE REPAIR	.4	28	36
MASONRY - GENERAL	.4	15	20
- W/ PURCH. CONC.	.4	19	22
MOVING AND RIGGING	.3	28	40
PAINT - GENERAL	.2	16	17
- SPRAY	.2	17	19
PEST CONTROL	.3	14	17
PIPEFITTING - INTERIOR	.3	15	20
- EXTERIOR	.3	18	25
PLUMBING - INTERIOR	.3	17	20
- EXTERIOR	.3	15	20
ROADS & GRNDS - GENERAL	.3	16	20
- LABORERS	.3	15	20
SHEETMETAL	.3	15	20
STRUC IRON & WELD - FIELD	.3	17	20
- SHOP	.6	17	22
TRACKAGE	.4	--	22
WHARFBUILDING	.5	24	32

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:
: Crane Operations; Material & Equipment
: Includes: time to load, relocate, unload, move, raise &
: lower, install or remove, relocate, raise & position, pull or
: load various types of material & equipment. (1)Crawler crane;
: (2)House trailer; (3)Steel plate; (4)Cylindrical object;(5)Steel
: matting/metal; (6,9)Heavy machinery/equipment; (7)Loaded plat-
: form; (8)Tree; (10)Tank; (11)Bleacher; (12)Personnel basket;
: (13)Transformer; (14)Medium weight equipment;(15)Motor-generator
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TASK TIME STANDARDS LISTING

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BT 001  Crawler crane 15 ton- UNLOAD      from flat car (15 ton).
                                         rmv-cribbing,chocks,addl parts
BT 002  House trailer      - RELOCATE; load&unload to flatbed truck
                                         trailer & piers using sling
BT 004  Steel plate to 5 ton- PROCURE from stock area;load,unload,sling
                                         using dunnage, lowboy & crane.
BT 005  Cylindrical object - MOVE to a new location. 8ft dia.x 50ft
                                         8ftx50ft long, six tons.
BT 007  Steel matting/metal - LOAD or UNLOAD bundles to lowboy truck
                                         with sling using dunnage.
BT 023  Heavy machinery/equipment- RELOCATE using block & tackle,jacks &
                                         roller skids.
BT 059  Loaded platform    - RAISE & POSITION between two poles-using
                                         crane
BT 056  Tree                - PULL with crane, position crane & lowboy
                                         at LOAD & UNLOAD site & load/unload
BT 024  Heavy machinery/equipment- MOVE using block & tackle, jacks,
                                         skids, crane & lowbed
BT 061  Tank, 4ftdia x 15ft - 3,000 lbs; MOVE from bldg to bldg using
                                         dollies, jacks, crane, lowboy.
BT 064  Iron bleacher section- 20ftwide x 32ft;RELOCATE, position lowboy
                                         crane, load & unload.
BT 170  Personnel basket    - RAISE & LOWER using crane.
BT 139  Transformers        - REMOVE & INSTALL from power line pole,50ft
                                         high; moving & rigging time only.
BT 143  Equipment, .5-10 ton- 30ftx 90ftlong; LOAD or UNLOAD to flatbed,
                                         RR or truck or ship.
BT 168  Motor,generator,units- exact POSITION using crane & sling.

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- BT 001 Unload crawler crane from flat car (15 ton).
Includes: rmv- wire rope tie downs, cribbing & chocks; sling clam bucket, dragline bucket, boom section & 3 boxes of spare parts; raise, position & release loads; position crane; move crane off railroad car approximately 50 yards.

002.09806 hours per hrs per crane
- BT 002 Relocate house trailer.
Includes: position crane & lowbed truck at load & inload points; sling & unsling trailer; place & remove dunnage on truck, load & unload & position 6 concrete piers; raise ,lower, position, release trailer.

001.57416 hours per house trailers
- BT 004 Procure one steel plate (up to 10,000 pounds) for fabrication from stock area and unload to lowbed truck.
Includes: position crane & lowbed truck at load & unload point ;attach & remove sling; raise, position & release load; set dunnage on lowbed truck; move 2 plates to select desired plate.

001.46466 hours per plates
- BT 005 Move cylindrical object, 8' diameter x 50' long, to new location.
Includes: position crane & lowbed, sling & unsling load; raise, position & release, load ; lash & unlash load (chain binders; place dunnage to set load & remove.

001.36290 hours per objects
- BT 007 Load or unload bundles of steel matting or sheet metal using dunnage.
Includes: position crane & lowbed at load & unload points; place dunnage and remove; sling & unsling bundles; raise, position & release loads at load & unload points.

000.50842 hours per JOB SETUP TIME

000.47433 hours per bundles
- BT 023 Relocate heavy machinery or equipment in shop using block and tackle, jacks and roller skids.
Includes: raise heavy part with hydrolic jacks & blocking, place on dollies or roller; pull heavy part on average of 50' using block & tackle.

001.44168 hours per items

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

- BT 059 Raise and position platform, elevated with load, between two poles.
Includes: position crane to basket, sling & unsling basket, attach & remove tag & safety lines; raise position & lower; sling & unsling platform & cradle, 2 times.

001.60080 hours per platforms
- BT 056 Pull tree with crane, load on truck and dispose of at dump.
Includes: position crane at load & unload points; sling & unsling; raise position release 2 times; lash & unlash on truck; pull tree to & from truck;

001.44380 hours per JOB SETUP TIME

000.00200 hours per feet each tree is pulled
- BT 024 Move heavy machinery or heavy equipment to a new location using block and tackle, jacks, skids, crane and lowbed.
Includes: relocate machine using block & tackle jacks & roller skids; position crane, lowbed, load & unload; sling unsling; lash & unlash load.

002.66645 hours per items
- BT 061 Move tank, 4' diameter x 15' long, approximately 3,000 pounds, out of building into another building.
Includes: place tank on dollies with jacks; roll out of building; sling & unsling; position crane & truck at load & unload site; raise position and release at load & unload site; lash & unlash to truck.

002.98819 hours per tanks
- BT 064 Relocate structural iron bleacher seat section, approximately 20' wide x 32' long.
Includes: dis & assemble tie rods; position crane & truck at load & unload site; sling & unsling front & rear sections & upright supports at sites; raise position release loads; lash & unlash loads.

004.09250 hours per bleacher seat sections
- BT 170 Raise and lower personnel basket with crane, up to 50'.
Includes: position crane; attach & remove sling; raise position and release load; additional crane travel.

000.03646 hours per JOB SETUP TIME

000.36388 hours per locations

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 139 Install or remove transformers from 50' high platform on power line pole.

Includes: position crane, climb up and down pole, sling & unsling transformers, raise position and release load.

000.17008 hours per poles

000.31198 hours per transformers per pole

BT 143 Load or unload, medium weight .5 to 10 tons, 30' to 90' long, pieces of equipment from trailer or railroad car to ground or surface of water using a mobile crane.

Includes: position crane, lash & unlash load, chain & binders attach & remove slings; raise, position, & release load.

000.17008 hours per JOB SETUP TIME

000.35818 hours per items

BT 168 Position motor generator units into precise location within vault using mobile crane.

Includes: position crane; attach & remove sling; raise position and release load.

000.17008 hours per JOB SETUP TIME

000.23026 hours per generators

:
: Crane Operations: Relocate- HVAC components, Artillery Targets :
: Tasks Include: time to load & place, remove & install, move :
: from one location to another exact location, various types of :
: heating, ventilating, and air conditioning items and/or :
: artillery targets. :
:
:

TASK TIME STANDARDS LISTING

BT 055 rmv or instl rooftop.... A/C EVAPORATIVE UNIT to 7500 cfm ea.
BT 138 rmv or instl rooftop.... HVAC MAJOR COMPONENTS one location
BT 141 rmv or instl rooftop.... FILTERS LARGE one location
BT 113 move to exact location... ARTILLERY TARGETS, of concrete block
BT 114 more to exact location... ARTILLERY TARGETS, of steel

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 055 Load and place air conditioning units on roof, evaporative type,
up to 7500 CFM each.
Includes: position 5 ton crane at load & unload points, sling
& unsling; raise, position & release load.

000.50842 hours per JOB SETUP TIME

000.46052 hours per air conditioning units

BT 138 Remove or install major HVAC items located on rooftop. Items
include air handling unit, cooling tower, water distiller, and
air conditioning compressor.

Includes: position crane & lowbed truck at load & unload
points, walk thru building to roof & return, sling & unsling
units, raise position and release unit.

000.56842 hours per JOB SETUP TIME

000.46052 hours per items

BT 141 Remove or install large filters - for large air conditioning
units, centrifugal blowers, rooftop ventilators. Filters up to
400 pounds each.

Includes: position crane, walk thru building to roof & return
rig chain fall & hoist to overhead beam & remove, rmv & install
screws, move filters sling & hoist, raise & hoist filters & lowe

000.23008 hours per JOB SETUP TIME

000.62088 hours per filters

BT 113 Move concrete blocks from one range location to another exact location using truck crane and lowbed truck.
Includes: position crane & lowbed truck at range block; attach sling to crane hook; attach & detach sling to block; raise position & release load; and go through same procedure at new site to unload lowbed truck of range block.

000.93106 hours per blocks

BT 114 Move steel artillery targets from one range location to another exact location using truck crane.

Includes: position crane at steel artillery target; raise target; position crane & target at concrete block; set target in exact location.

000.54605 hours per targets

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: Crane Operations: Communications Tower Antennas :
: Tasks Include: time to install or remove, disassemble & erect. :
:
:

TASK TIME STANDARDS LISTING

BT 135 Transmitter disks.....INSTALL or REMOVE.
BT 136 Communication tower sections....DISASSEMBLE
BT 137 Communication tower sections....ERECT

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 135 Install or remove high or low frequency transmitter disks to or from a communications tower (one winch operator, two signal one tagline operator, two riggers).
Includes: climb tower, raise tools, connect & disconnect cable, catwalk, lugall jack, jib pole , dick, hoist to position & secure disk to tower.

011.34304 hours per disks

BT 136 Disassemble sections of communications tower (two drivers, one signalman, one rigger).
Includes: position crane, climb tower, raise & lower tools, raise boom to section, attach slings, disassamble section bolts lower section to ground.

000.71752 hours per JOB SETUP TIME

003.52744 hours per sections

BT 137 Erect communications tower sections (two drivers, two rigger one signalman).
Includes: position crane & winch truck near tower, attach winch cable & sling to tower section, climb & raise & lower tools, raise tower section 30', assemble section bolts.

000.97190 hours per JOB SETUP TIME

007.94840 hours per sections

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:
: Crane Operations: Marine Rigging
: Tasks Include: time to load or unload or exchange marine rigging
: material or equipment. (1)Cargo container, palletized load, flat
: steel plates, 30' steel beam; (2)Stacked steel plate; (3)Diesel
: engine; (4)3000 gal. asphalt tank;
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TASK TIME STANDARDS LISTING

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BT 111  Portal crane  -LOAD OR UNLOAD ITEMS/FREIGHT 1 to 7 locations
                                30ft apart ship to dock 18ft high
BT 140  Floating crane -LOAD OR UNLOAD ITEMS  steel plate 65T ea from
                                RR CAR to BARGE at the dock
BT 149  Floating crane -EXCHANGE                DIESEL ENGINED
BT 146  Floating crane -LOAD OR UNLOAD          3,000 GALLON ASPHALT TANK

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EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

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BT 111  Load or unload(ship to dock): cargo containers to or from raised
        positions (fork truck or dunnage); palletized loads (strapped)
        to ship from pier (15' elevation); flat steel plates (4' x 20'
        1") from ship to pier using plate clamps and crane; 30' steel
        beams from ship to pier.Incls:position crane sling raise pos re
        M&R crane portal unload ship to dock 18' high.

        000.17008 hours per JOB SETUP TIME

        000.23026 hours per items

        000.01500 hours per locations

BT 140  Load or unload stacks of steel plates (25 to 65 tons per stack)
        from rail road car to barge using floating crane.
        Includes: position crane, attach slings to load & dunnage,
        raise position & release load, position dunnage under load.

        000.17008 hours per JOB SETUP TIME

        000.26479 hours per stacks

BT 149  Exchange diesel engines on portal using a floating crane (does
        not include moving of crane by tugboat).
        Includes: position crane; attach & remove sling to crane cab
        twice, and to each diesel engine once; raise position & release
        loads.

        000.54556 hours per diesel engines

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BT 146 Load or unload one 3,000 gallon asphalt tank from barge to deck of ship using floating crane (does not include maneuvering of crane by tugboat).

Includes: position crane; attach & remove sling from tank; raise position & release load.

000.40034 hours per tanks

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: Crane Operations- Tugboat & Docking Equipment
: Tasks include time to load or unload, load & unload, install
: & remove, remove, move, & place or remove tugboat &
: docking equipment. (1,2,3,4,5,6,7,8)Fender; (9)Camel; (10)Brow;
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TASK TIME STANDARDS LISTING

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BT 159 Crane Truck- STEEL FENDER remove from yard derrick
BT 160 Crane Truck- STEEL FENDERS remove & install from yard derrick
BT 161 Crane Truck- BOW or STERN FENDERS load OR unload to&fromFLATBED
BT 162 Crane Truck- BOW or STERN FENDERS load & unload to&from FLATBED
BT 163 Crane Truck&Forklift- FENDERS move to rigging loft
BT 164 Crane Truck- FENDERS install or remove to TUGBOAT
BT 166 FENDERS- remove from water and place on fork truck.
BT 167 Tugboat bow or stern FENDERS- install or remove.
BT 097 Yard Derrick- CAMEL remove from water with yard derrick
BT 104 Crane Portal- BROW place or remove using portal crane.

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EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

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BT 159 Remove steel fenders from yard derrick using truck crane (driver
and signalman).
Includes: position crane near yard derrick; raise & lower boo
; hook and unhooksteel fender; hold fender for cutting (process
time); lift and aside fender to yard.

000.46600 hours per fenders

BT 160 Remove and install rubber fenders from derrick using truck crane
(driver and signalman).
Includes: position crane near yard derrick; raise & lower boo
; hook & unhook rubber fender; hold fender for bolt removal;
lift & aside fender to yard; hold new fender in place for
drilling bolt holes; hold fender in place for bolt installation

000.69560 hours per fenders

BT 161 Load or unload bow or stern fenders at storage yard from/to
flatbed trailer.
Includes: position load & flatbed; attach or remove crane
hook; raise position & release load; lash or unlash load to
trailer.

000.25421 hours per JOB SETUP TIME

000.21039 hours per fenders

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- BT 162 Load and unload bow or stern fenders at storage yard from/to flatbed trailer.
Includes: position load & flatbed; attach & remove crane hook raise position & release load; lash & unlash load to trailer average 3 items - this whole procedure twice.

000.50842 hours per JOB SETUP TIME

000.42076 hours per fenders
- BT 163 Move fender to/from storage area to rigging loft.
Includes: position crane; attack & remove crane hook; raise position & release load; transport fender with fork lift; position forklift.

000.17298 hours per JOB SETUP TIME

000.23195 hours per fenders
- BT 164 Install or remove tugboat side fenders from/to dockside flatbed trailer.
Includes: position crane; install & remove shackles & bolts; attach & remove crane hook; raise position & release load; position flatbed trailer; lash & unlash load to trailer(average 3 items)

000.25421 hours per JOB SETUP TIME

000.28559 hours per fenders
- BT 166 Remove fenders from water and place on fork truck on pier.
Includes: position crane & forklift truck; raise position release load; attach & release slings.

000.17298 hours per JOB SETUP TIME

000.23026 hours per fenders
- BT 167 Install or remove on tugboat, bow or stern fenders.
Includes: position crane; install or remove shackles & bolts; attach and remove crane hook; raise position release loads ; lash and unlash load to trailer (average 3 items); position flatbed trailer.

000.25421 hours per JOB SETUP TIME

000.51119 hours per fenders

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 097 Remove camel from water with yard derrick to set on forklifts for transport to repair yard.

Includes: attach with slings& hooks to 4 padeyes on camel; raise camel, lower, position & set on forklift & release; process time, position forklift to receive camel.

000.79607 hours per camels

BT 104 Place or remove brow to dockside barge using portal crane.

Includes: position crane; attach & release sling; raise, position & release load; additional crane travel.

000.47534 hours per brows

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:
: Furniture Moving
: Minor items include chairs, small tables, boxes, wastepaper
: baskets, typewriters, and any hand carried office furniture.
: Major items include desks, large tables, file cabinets,
: bookshelves, copier machines, small computer consoles and
: conference tables. Removable obstructions include legs, stops,
: desk legs, etc. Using a crane to move major items to a
: different floor or level utilizing exterior landings. Use a
: crane and/or lowbed truck to move major items. (1,4)Minor items;
: (2,3,5,6,7,8,9,10)Major items; (11)Removable obstructions;
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TASK TIME STANDARDS LISTING

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BT 028  Minor items- move to new location same building, any floor.
BT 029  Major items- move to new location same building, on the same
                        floor or level.
BT 030  Major items- move to new location same building, on a different
                        floor or level, using a small crane.
BT 031  Minor items- move to new location different building, any floor
BT 032  Major items- move to new location different building, first
                        floor, a crane is not used.
BT 047  Major items- move to new location different building, a crane
                        to be used at ONE location.
BT 048  Major items- move to new location different building, a crane
                        to be used at TWO locations
BT 049  Major items- move from warehouse to office building; first floor
BT 050  Major items- move from warehouse to office building; upper floor
BT 033  Major items- measure for clearance.
BT 034  Removable obstructions- disassemble or assemble.

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EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

- BT 028 Move minor items to new location in the same building. Minor items include chairs, small tables, boxes, wastepaper baskets, typewriters and any hand carried furniture.
Includes: hand carry minor items to new location.

000.03453 hours per items
- BT 029 Move major items to new location on the same floor of a building. Major items include desks, large tables, file cabinets, bookshelves, copier machines, small computer consoles, conference tables
Includes: move major items to new location (2 men).

000.10359 hours per items
- BT 030 Move major items to a different level in the same building using a small crane. Major items include desks, large tables, file cabinets, bookshelves, copier machines, small computer consoles, conference tables.
Includes: use of small crane same building different level; sling and unsling; raise, position, release load.

000.01500 hours per JOB SETUP TIME

000.38531 hours per items
- BT 031 Move minor items to new location in a different building. Minor items include chairs, small tables, boxes, wastepaper baskets, typewriters, and hand carried office equipment
Includes: move minor items to & from truck to new location (hand carry furniture to different building)

000.06906 hours per items
- BT 032 Move major items from ground floor of one building to ground floor of another building using truck only. Major items include desks, large tables, file cabinets, bookshelves, copier machine, small computer consoles, conference tables
Includes: 2 men hand carry furniture ground floor to ground floor & position truck at 2 locations.

000.16826 hours per JOB SETUP TIME

000.10359 hours per items
- BT 047 Move major items from 1st & upper floor of one location to first or upper floor of another location, using a crane at one location & truck at two locations. Major items include desks, large table, file cabinets.
Includes: position crane 1 location, truck 2 locations; sling & unsling item, raise, position, release load.

000.33834 hours per JOB SETUP TIME

000.38531 hours per items

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

- BT 048 Move major items from first and upper floors of one location to first and upper floors of another location, using a crane and truck.
Includes: position crane & truck 2 locations, sling & unsling raise position release load; hand carry item to new location.

000.50842 hours per JOB SETUP TIME

000.66703 hours per items
- BT 049 Move major items from warehouse to office building, first or second floor location.
Includes: move truck to warehouse & office, locate major item & move to truck, lash & unlash load; move major item to new location.

000.25098 hours per JOB SETUP TIME

000.12834 hours per items
- BT 050 Move major items from warehouse to upper floor of building using a truck and crane.
Includes: position truck at warehouse & building; locate major item & move to truck; lash & unlash load; position crane sling unsling; raise position & release; move major item to new location.

000.42106 hours per JOB SETUP TIME

000.41006 hours per items
- BT 033 Measure major items for clearance.

000.01220 hours per items
- BT 034 Disassemble or assemble legs, stops, desk steps, and other removable obstructions.
Includes: time to disassemble & assemble an item as 1 table leg.

000.02200 hours per items

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: Reeving
: Tasks include time to remove, install, and replace various types
: of reeving equipment. (1)Winch cable and hook;(2)Auxiliary hoist
: cable; (3)Topping hoist cable; (4)Main hoist cable; (5)Main and
: topping hoist cable; (6)Yard derrick;
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TASK TIME STANDARDS LISTING

BT 067	Winch cable & hook	(remove & reinstall)
BT 071	Auxiliary hoist cable	(remove & reinstall)
BT 068	Topping hoist cable	(remove & reinstall)
BT 069	Main hoist cable	(remove & reinstall)
BT 070	Main & topping hoist cables	(remove & reinstall)
BT 116	Yard derrick	(reeve sections)

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 067 Remove old cable from winch and hook and install new cable.
Includes: unwind old & rewind new cable; loosen set screw & rmv cable end from winch; position thimble eye & hook; make standard 6 strand wire rope end splice; insert seized end in winch drum access & tighten set screw & pound winch cable to drum with heavy hammer.

000.66755 hours per winch cable and hooks

000.00200 hours per feet of cable

BT 071 Remove auxiliary hoist from crane & reinstall.
Includes: unreeve old cable from drum & set on pallet; let out remaining cable on wench drum; reeve new cable or rewind old cable on drum; take up & pull taut first layer of cable.

001.52372 hours per auxiliary hoist cable

000.00200 hours per feet of cable

BT 068 Remove topping hoist cable from bridle assembly on crane and reinstall.
Includes: position crane at site; position A-frame under boom & lower; unreeve cable from drum & set on pallet; let out remaining on drum;lash boom pennants above bridle & unlash ; pour dea end socket;reeve new toppinghoist cable to bridle,take upinspec

003.22897 hours per topping hoist cable

000.00200 hours per feet of cable

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

- BT 069 Remove main hoist cable, hook and fall block on crane and reinstall.
Includes: position crane & support for boom, lower boom; unreeve reeve from drum & block sheaves, set on pallet; let out remaining cable on winch drum; position truck with new set; raise position load unload release load; pour test new socket; inspect unit
003.94995 hours per main hoist cables
000.00200 hours per feet of cable
- BT 070 Remove main and topping hoist from hook, fall block and bridle assemble on crane and reinstall.
Includes: position crane; support boom; unreeve, reeve fall block sheaves, topping hoist, let out remaining drum cable, lash & unlash bridle; pour sockets for hook & bridle; using chain falls position & reinstall fall block & bridle & reeve, test, inspect
006.54740 hours per main and topping hoist cables
000.00200 hours per feet of cable
- BT 116 Reeve sections on a yard derrick (fore, mid, or aft sections), 12 sheaves per section.
Includes: reeve & unreeve 1600' of yard derrick cables.
003.96360 hours per sections

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: SCAFFOLD TASK:include time to assemble,move,level,raise & lower.
: 1. PORTABLE PIPE SCAFFOLDING 2. PREFABRICATED PIPE SCAFFOLDING
: 3. SNAP ON ALUM.TYPE SCAFFOLD 4. POWERED SCAFFOLDING
: Task in 1 & 2 are in a formula format. That is you will need
: to fill in the number of total units that are ground sections &
: the total number of additional sections that are above and not
: in contact with the ground.
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:
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TASK TIME STANDARDS LISTING

BT 185	Prefabricated pipe scaffold-	"N" sections high; (assemble or disassemble)
BT 186	Portable scaffold-"N" sections high; (assemble or disassemble)	5ftx6ft SECT.
BT 184	Portable scaffold-	snap-on aluminum (assemble or disassemble)
	(ground level only)	7ftx6ft to 8ft SECT.
BT 175	Powered scaffold-	raise and lower.

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 185	PREFABRICATED SCAFFOLDING 5'x6' sections ASSEMBLE OR DISASSEMBLE ground level & or additional levels, up to 5 levels. Includes: position & install end frames sections; install cross bars sections; move scaffold boards into place; position shims, adjust level, tap with hammer to align & all similar motions needed to join bottom & additional sections above ground section
	000.33365 hours per ground sections used (total number of 5'x6' sections on ground)
	000.32068 hours per addl.sect.(total no.of 5'x6' sections above ground level sect.)
BT 186	PORTABLE SCAFFOLDING 5'x6' sections ASSEMBLE OR DISASSEMBLE ground level & or additional levels, up to 5 levels. Includes: bottom section-(roll into place, lock wheels, clam 4 cross bars & brackets into place, move boards into place & attach.), addl.-move additional sections & boards up in place, clamp 4 cross bars & 4 cross brackets into place.
	000.19495 hours per ground sections used (total number of 5'x6' sections on ground)
	000.31600 hours per addl.sect.(total no.of 5'x6' sections above ground level sect.)
BT 184	Assemble or disassemble "snap on" portable aluminum scaffolding 7' high, 6'to 8' long, and 4.5' wide at ground level (one level high, two man job) parts include: 2 end frames, 4 diagonal braces, and 2 platforms. Ground level assembly only
	000.06235 hours per sections

BT 175 Move, level, raise and lower powered scaffolding (portable electric highlift).

Includes: roll power scaffold into place; set 4 jack stands i to place; connect 2 side outrigger rods; crank jackstands to level scaffold;raise power scaffold to exact height; lower powe scaffold to bottom level; raise jackstands.

000.65966 hours per occurrences

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:
: Shop operations
: Tasks include time for pouring and testing sockets, remove and
: reinstall socket to cable, fabricate slings, splice ropes, and
: swage wire rope cables. (1,2,3)Socket; (4,5,6,7,10)Sling;
: (8,9)Rope, splice;
:
:
:

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TASK TIME STANDARDS LISTING

BT 075	Socket-	up to 5/8";	(pour and test)
BT 073	Socket-	3/4" to 1-1/2";	(pour and test)
BT 074	Socket-	up to 1-1/2";	(remove & reinstall to new cable)
BT 072	Sling,	Wire rope with clips,	up to 1-1/2" dia; (fabricate)
BT 076	Sling,	Nylon rope;	(fabricate)
BT 077	Sling,	simple Wire rope;	(fabricate)
BT 079	Sling,	Manila rope;	(fabricate)
BT 117	Sling,	Wire rope cable;	(swage)
BT 078		Manila rope;	short(splice)
BT 080		Nylon rope;	short(splice)

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 075 Pour socket (up to 5/8"), including test.
Includes: obtain mat'ls; attach socket to cable; unlay wire, straighten, clean, wipe, acid dip each strand; set zinc pot, carry lsdle & pour into socket; position to shear & vice as req; heat socket with torch; test socket- position and clamp or shackle ends, hand pump & wait 12 min process time.

001.22069 hours per sockets

BT 073 Pour socket (3/4" to 1-1/2"), including hydraulic test.
Includes: obtain mat'ls, attach socket to cable, unlay wire- straighten, clean, wipe, acid dip each strand; set zinc pot, ladle, & pour into socket, position to shear & vice as required heat socket with torch. Test socket-obtain cable & position end attaching& rmv shackles; hand pump & process wait 12 min.

001.44157 hours per sockets

BT 074 Remove and reinstall socket to new cable (up to 1-1/2").
Includes: cut wire rope to length with cable shears; remove old socket from cable; pour socket; test socket.

001.74652 hours per sockets

- BT 072 Fabricate wire rope sling with thimble secured with wire rope clips (up to 1-1/2" diameter).
Includes: cutting wire rope to length ;measure 7 mark wire rope 4 places & make 2 bends;measure 7 bend loop; position wire in shears-(thimble or U bolt; cable & socket in vice or remove) position thimble in loops & attach 12 clips;tighten &loosen vic

000.80687 hours per slings
- BT 076 Fabricate nylon rope sling.
Includes: make short splice with nylon rope- pound & roll completed splice to smooth splice.

000.36237 hours per slings
- BT 077 Fabricate simple wire rope sling and tag.
Includes: fabricate simple sling using standard 6-strand wire rope splices & tag; apply serving to splice.

001.14757 hours per slings
- BT 079 Fabricate manila rope sling.
Includes: all actions to loose, wip, trim, form 2 splices to make sling.

000.60562 hours per slings
- BT 117 Swage wire rope cable sling.
Includes: cut cable to length; assemble swedge clamp to cable set swage cable & die in press & press.

000.12038 hours per slings
- BT 078 Make short splice with manila rope.
Includes: all actions required to loose, splice, trim, and size form splice.

000.30281 hours per splices
- BT 080 Make short splice with nylon rope.
Includes: all actions required to make the splice.

000.36237 hours per splices

:
: Weight Capacity Testing
: Tasks include time to obtain test weights, perform 360 degree
: swing test, boom load test, load test with outriggers retracted,
: side load test while travelling forward and backward, forklift
: test, overload test, additional overload test, 12 minute over-
: load test and fill out test inspection report. All equipment is
: to be tested at 150% of its rated capacity. (1)Truck crane;
: (2)Telescopic truck/Crawler cranes; (3)Forklift; (4)Hoisting
: equipment;
:
:
:

TASK TIME STANDARDS LISTING

BT 017 Truck Crane, up to 45 ton capacity.
BT 018 Telescopic Truck Crane or Crawler Crane, up to 45 ton capacity.
BT 019 Forklift trucks.
BT 020 Hoisting Equipment, up to 15 ton capacity.

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 017 Weight capacity test crane at 150% of rated capacity (up to 45 ton crane).
Includes: position hydraulic crane adjacent to unit; attach & remove sling; raise, position & release weights & return them to truck, attach & rmv addl padeyes & sling; raise, position & release wts; pull chain hoist, make hook & link test measure & inspect crane

004.13370 hours per cranes

000.29150 hours per weights

BT 018 Weight capacity test telescopic truck crane or crawler crane, up to 45 ton capacity at 150% of rated capacity.
Includes: obtain test wts. in yard; perform boom load test on unit; fill out test report.

002.16305 hours per cranes

000.29150 hours per weights

BT 019 Weight capacity test forklift trucks. Test at 150% of rated capacity.
Includes: weight capacity test and fill out inspection report

001.25357 hours per trucks

BT 020 Weight capacity test hoisting equipment, up to 15 ton capacity (bridge, trolley, chain, jib, A-frame or monorail) at 150% of rated capacity.

Includes: position unit, attach & rmv sling obtain return wt. attach sling & pad eyes; lift load-wait; make measurements & inspect; fill out inspection report.

002.60563 hours per units

:
: Time for loading (or unloading) bulldozer (or similar weighting :
: up to 75 tons) onto folding gooseneck/removable gooseneck trai- :
: ler assumes that the 12 horse power hydraulic self-lifting sys- :
: tem is being used under ideal weather conditions (60 to 80 de- :
: grees F). :
: :
:

TASK TIME STANDARDS LISTING

BT 200	GOOSENECK TRAILER - hydraulic, self-lifting	LOAD & UNLOAD
	time for tie downs not included	
BT 201	GOOSENECK TRAILER - hydraulic, self-lifting	LOAD & UNLOAD
	time for tie downs included	

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 200	Load and unload bulldozer (or similar) onto folding gooseneck (removable gooseneck) trailer with hydraulic self-lifting/lowering system --tie down time not included 000.25506 hours per "load and unload" tasks
BT 201	Load and unload bulldozer (or other heavy equipment) on/off folding gooseneck (removable gooseneck) trailer using hydraulic selflifting-lowering system --tie down time included 000.43809 hours per "load and unload" of heavy equipment

:
: For positioning of concrete street barriers, there's a backhoe :
: operator and a person to secure chains to barriers. Transpor- :
: tation time of heavy equipment or barriers prior to and subse- :
: quent to placing or removing concrete street barrier is not :
: included :
:
:

TASK TIME STANDARDS LISTING

BT 202 CONCRETE STREET BARRIERS - place to exact location per BARRIER

EPS TASK TIME STANDARDS - DESCRIPTIONS AND UNIT HOURS

BT 202 Place (or remove) concrete street barrier with heavy equipment
--position to exact location within heavy equipment's reach
--two men job
includes: position chains on barrier; secure chains; lift, turn
and place barrier; take off chains; reach for next barrier.

000.03406 hours per barriers

TASK TIME STANDARDS DEVELOPMENT BACKUP

- BT 001 1 REMOVE WIRE ROPE TIE DOWNS
2 REMOVE CRIBBING AND CHOCKS
3 SLING CLAM BUCKET, DRAGLINE BUCKET, BOOM SECTION
AND 3 BOXES OF SPARE PARTS
4 RAISE, POSITIONS AND RELEASE LOADS
5 POSITION CRANE
6 MOVE CRANE OFF RAILROAD CAR APPROXIMATELY 50 YARDS
- BT 002 1 POSITION CRANE & LOWBED TRUCK AT LOAD & UNLOAD
POINTS
2 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
3 SLING AND UNSLING TRAILER AT LOAD AND UNLOAD POINT
4 PLACE DUNNAGE ON TRUCK TO SET TRAILER AND REMOVE
5 LOAD AND UNLOAD 6 CONCRETE PIERS
6 POSITION PIERS
7 RAISE, POSITION AND RELEASE TRAILER
- BT 004 1 POSITION CRANE AND LOWBED TRUCK AT LOAD AND UNLOAD
POINTS
2 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
3 ATTACH AND REMOVE SLINGS AT LOAD AND UNLOAD POINTS
4 RAISE, POSITION AND RELEASE PLATES AT LOAD AND UNL
OAD POINTS
5 SET DUNNAGE ON LOWBED TRUCK
6 MOVE TWO PLATES TO SELECT DESIRED PLATE
- BT 005 1 POSITION CRANE AT LOAD AND UNLOAD POINTS
2 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
3 SLING AND UNSLING LOAD AT LOAD AND UNLOAD POINTS
4 RAISE, POSITION AND RELEASE LOAD AT LOAD AND UNLOA
D POINTS
5 LASH AND UNLASH LOAD - CHAIN BINDERS
6 PLACE DUNNAGE TO SET LOAD AND REMOVE
- BT 007 1 POSITION CRANE AND LOWBED AT LOAD AND UNLOAD POINT
S
2 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
3 PLACE DUNNAGE AND REMOVE ONE INSTALL AND ONE REMOV
E PER 5 BUNDLES
4 SLING AND UNSLING BUNDLES AT LOAD AND UNLOAD POINT
S
5 RAISE, POSITION AND RELEASE LOADS AT LOAD AND UNLO
AD POINTS
- BT 017 1 PERFORM 360 DEGREE SWING TEST ON TRUCK CRANE
2 PERFORM BOOM LOAD TEST ON TRUCK OR CRAWLER CRANE
3 PERFORM LOAD TEST ON TRUCK CRANE, OUTRIGGER RETRAC
TED
4 PERFORM SIDE LOAD TEST, TRUCK CRANE, TRAVELING 50
FEET FORWARD AND 50 FEET BACKWARD
5 FILL OUT CRANE TEST INSPECTION REPORT

BT 018 1 OBTAIN TEST WEIGHTS IN TEST YARD
 2 PERFORM BOOM LOAD TEST ON TRUCK OR CRAWLER CRANE
 3 FILL OUT CRANE TEST INSPECTION REPORT

BT 019 1 WEIGHT CAPACITY TEST FORKLIFT
 2 FILL OUT INSPECTION REPORT FORM

BT 020 1 POSITION SMALL HYDRAULIC 5 TON CRANE (SUCH AS TORP
 EDO OF DOCK SIDE) ADJACENT TO HOIST (MONORAIL, BRI
 2 ATTACH AND REMOVE SLING TO WEIGHT BRACKET AND CRAN
 E HOOK; REPEAT FOR HOIST HOOK; RETURN WEIGHTS TO T
 3 RAISE, POSITION AND RELEASE COUNTERWEIGHTS UNDER HO
 IST (10,000#); RETURN WEIGHTS TO TRUCK
 4 ATTACH AND REMOVE TEMPORARY PADEYES (2) TO ADDITIO
 NAL OVERLOAD WEIGHT
 5 ATTACH AND REMOVE SLING TO TWO (2) PADEYES AND TO
 CRANE AND TEST HOIST HOOKS FOR ADDITIONAL OVERLOAD
 6 RAISE, POSITION TO OTHER WEIGHTS AND RELEASE ADDIT
 IONSL OVERLOAD WEIGHT; RETURN TO TRUCK
 7 LIFT LOAD, PERFORM 12 MINUTE OVERLOAD TEST
 8 INSPECT AND MEASURE 5 CHAIN LINKS, INSPECT CONDITI
 ON OF CRANE, SHAFTING, GEARS, TRACKS, CABLE AND BL
 9 FILL OUT CRANE TEST INSPECTION REPORT

BT 023 1 RAISE HEAVY PART WITH HYDRAULIC JACKS AND BLOCKING
 , PLACE ON DOLLIES OR ROLLER
 2 PULL HEAVY PART ON AVG. OF 50 FEET USING BLOCK AND
 TACKLE

BT 024 1 RELOCATE HEAVY MACHINERY OR EQUIPMENT
 2 POSITION CRANE AND LOWBED AT LOAD AND UNLOAD POINT
 S
 3 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
 4 SLING AND UNSLING LOAD AT LOAD AND UNLOAD POINTS
 5 RAISE, POSITION AND RELEASE LOAD AT LOAD AND UNLOA
 D POINTS
 6 LASH AND UNLASH TO TRUCK

BT 028 1 MOVE MINOR ITEMS TO NEW LOCATION

BT 029 1 MOVE MAJOR ITEMS TO NEW LOCATION (2 MEN)

BT 030 1 POSITION SMALL CRANE
 2 ATTACH AND REMOVE SLING FROM MAJOR ITEM
 3 RAISE, POSITION AND RELEASE LOAD
 4 MOVE MAJOR ITEM TO NEW LOCATION

BT 031 1 MOVE MINOR ITEMS TO TRUCK AND FROM TRUCK TO NEW LO
 CATION NOTE: TRUCK INCLUDED IN MAJOR ITEMS

BT 032 1 POSITION TRUCK AT 2 LOCATIONS
2 MOVE MAJOR ITEM TO NEW LOCATION

BT 033 1 MEASURE, MARK AND CHECK MEASURE OF MAJOR ITEMS

BT 034 1 INSTALL OR REMOVE SMALL NUT OR SCREW HOLDING DESK
LEG OR STOP
2 DISASSEMBLE OR ASSEMBLE DESK LEGS, STOPS TO FIT THROUGH DOOR

BT 047 1 POSITION CRANE AT ONE LOCATION
2 POSITION TRUCK AT TWO LOCATIONS
3 ATTACH AND REMOVE SLING FROM MAJOR ITEMS
4 RAISE, POSITION AND RELEASE LOAD
5 MOVE MAJOR ITEM TO NEW LOCATION

BT 048 1 POSITION CRANE AT 2 LOCATIONS
2 POSITION TRUCK AT 2 LOCATIONS
3 ATTACH AND REMOVE SLING FROM MAJOR ITEM
4 RAISE, POSITION AND RELEASE LOAD
5 MOVE MAJOR ITEM TO NEW LOCATION

BT 049 1 MOVE TRUCK TO WAREHOUSE DOCK AND TO BUILDING LOCATION (2 MEN)
2 LOCATE MAJOR ITEM IN WAREHOUSE, MOVE TO TRUCK
3 LASH AND UNLASH LOAD
4 MOVE MAJOR ITEM TO NEW LOCATION

BT 050 1 POSITION TRUCK AT WAREHOUSE AND BUILDING
2 LOCATE MAJOR ITEM IN WAREHOUSE, MOVE TO TRUCK
3 LASH AND UNLASH LOAD
4 POSITION CRANE
5 ATTACH AND REMOVE SLING FROM MAJOR ITEM
6 RAISE, POSITION AND RELEASE LOAD
7 MOVE MAJOR ITEM TO NEW LOCATION

BT 055 1 POSITION 5 TON CRANE AT LOAD AND UNLOAD POINTS
2 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
3 SLING AND UNSLING LOAD AT LOAD AND UNLOAD POINTS
4 RAISE, POSITION AND RELEASE LOADS

BT 056 1 POSITION CRANE AT LOAD AND UNLOAD POINTS
2 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
3 SLING AND UNSLING TREE
4 RAISE, POSITION AND RELEASE LOAD (TWO TIMES) (ONCE TO PULL AND SHAKE EARTH FROM ROOTS, ONCE ON LOWBED)
5 LASH AND UNLASH TREE TO LOWBED TRUCK
6 PULL TREE TO AND FROM LOWBED TRUCK AT DUMP

BT 059 1 POSITION CRANE AT POLES
2 ATTACH AND REMOVE SLING TO BASKET
3 ATTACH AND REMOVE TAGLINE TO BASKET
4 CONNECT AND DISCONNECT SAFETY CABLE
5 RAISE, POSITION AND LOWER PERSONNEL BASKET TO MEASURE AND INSTALL BOLTS
6 ATTACH AND REMOVE TAGLINES (2) TO PLATFORM
7 SLING AND UNSLING PLATFORM AND CRADLE
8 RAISE, POSITION AND RELEASE PLATFORM AND CRADLE
9 SLING AND UNSLING LOAD
10 RAISE, POSITION AND RELEASE LOAD ON CRADLE

BT 061 1 PLACE TANK ON DOLLIES WITH JACKS
2 ROLL OUT/IN BUILDING
3 SLING TO LIFT ON AND OFF TRUCK
4 POSITION CRANE AND LOWBED AT LOAD AND UNLOAD POINTS
5 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
6 RAISE, POSITION AND RELEASE LOAD AT LOAD AND UNLOAD POINTS
7 LASH AND UNLASH TO TRUCK TO TRANSPORT

BT 064 1 DISASSEMBLE AND ASSEMBLE TIE RODS
2 POSITION CRANE AND LOWBED AT LOAD AND UNLOAD POINTS
3 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
4 SLING AND UNSLING FRONT AND REAR SECTIONS AND UPRIGHT SUPPORTS AT LOAD AND UNLOAD POINTS
5 RAISE, POSITION AND RELEASE LOADS AT LOAD AND UNLOAD POINTS
6 LASH AND UNLASH LOAD

BT 067 1 UNWIND OLD CABLE AND REWIND NEW CABLE
2 LOOSEN SET SCREW
3 REMOVE CABLE END FROM WINCH
4 POSITION THIMBLE EYE AND HOOK
5 FABRICATE STANDARD 6-STRAND WIRE ROPE END SPLICE
6 INSERT SEIZED END IN WINCH DRUM RECESS
7 TIGHTEN SET SCREW
8 POUND (ALIGN) WINCH CABLE TO DRUM WITH HEAVY HAMMER

BT 068 1 POSITION CRANE AT RIGGING
2 POSITION BOOM SUPPORT A-FRAME UNDER BOOM
3 LOWER BOOM TO REST ON A-FRAME
4 UNREEVE OLD CABLE FROM DRUM AND SET ON PALLET
5 LET OUT REMAINING CABLE ON WINCH DRUM
6 LASH BOOM PENNANTS ABOVE BRIDLE ASSEMBLY AND UNLASH
7 POUR DEAD END SOCKET
8 REEVE NEW TOPPING HOIST CABLE TO BRIDLE ASSEMBLY
9 TAKE UP AND PULL TAUT FIRST LAYER OF CABLE ON WINCH DRUM
10 TEST CRANE, (RAISE BOOM TO LIMIT AND RETURN)
11 REMOVE OLD SOCKET FROM CABLE

BT 069 1 POSITION CRANE
2 POSITION BOOM SUPPORT A-FRAME UNDER BOOM
3 LOWER BOOM TO REST ON A-FRAME AND LOWER HOOK TO GROUND
4 UNREEVE OLD CABLE FROM DRUM AND FALL BLOCK SHEAVES AND SET ON PALLET
5 LET OUT REMAINING CABLE ON WINCH DRUM
6 POSITION BOOM TRUCK FORWARD AND BACK TO FALL BLOCK AND HOOK RETURN WITH NEW SET
7 RAISE, POSITION AND LOWER CHAIN FALLS TO BLOCK, LOAD AND UNLOAD, RETURN WITH NEW SET
8 ATTACH AND REMOVE CHAIN FALLS TO CRANE FALL BLOCK AND HOOK
9 POUR NEW DEAD END SOCKET
10 REEVE NEW MAIN HOIST CABLE HOOK AND FALL BLOCK
11 TAKE UP AND PULL TAUT FIRST LAY OF CABLE ON WINCH DRUM
12 TEST CRANE (RAISE BOOM AND HOOK TO VERTICAL LIMIT AND LOWER)
13 INSPECT CABLE HOOK AND FALL BLOCK, CHECK FOR TWISTING
14 REMOVE OLD SOCKET FROM CABLE
15 TEST NEW SOCKET

BT 070 1 POSITION CRANE AT RIGGING LOFT
2 POSITION BOOM SUPPORT A-FRAME UNDER BOOM
3 LOWER BOOM TO REST ON A-FRAME AND LOWER HOOK TO GROUND
4 UNREEVE OLD CABLE FROM DRUM AND FALL BLOCK SHEAVES AND SET ON PALLET
5 UNREEVE OLD TOPPING HOIST CABLE FROM BRIDLE ASSEMBLY AND SET ON PALLET
6 LET OUT REMAINING CABLE ON BOTH WINCH DRUMS
7 LASH BOOM PENNANTS ABOVE BRIDLE ASSEMBLY AND UNLASH
8 POUR TWO NEW DEAD END SOCKETS FOR HOOK AND BRIDLE ASSEMBLY DEAD ENDS
9 POSITION BOOM TRUCK FORWARD AND BACK TO FALL BLOCK AND HOOK, RETURN WITH NEW SET
10 RAISE, POSITION AND LOWER CHAIN FALLS TO BLOCK, LOAD AND UNLOAD, RETURN WITH NEW SET
11 ATTACH AND REMOVE CHAIN FALLS TO CRANE FALL BLOCK AND HOOK
12 REEVE NEW TOPPING LIFT CABLE TO BRIDLE ASSEMBLY
13 REEVE NEW MAIN HOIST CABLE, HOOK AND FALL BLOCK
14 TAKE UP AND PULL TAUT FIRST LAYER OF CABLE ON WINCH DRUM
15 TEST CRANE (RAISE BOOM AND HOOK TO VERTICAL LIMIT AND LOWER)
16 INSPECT CABLE HOOK AND FALL BLOCK FOR TWISTING
17 REMOVE OLD SOCKET FROM CABLE
18 TEST NEW SOCKETS

BT 071 1 UNREEVE OLD CABLE FROM DRUM AND SET ON PALLET
2 LET OUT REMAINING CABLE ON WINCH DRUM
3 REEVE NEW CABLE OR REWIND OLD CABLE ON DRUM
4 TAKE UP AND PULL TAUT FIRST LAYER OF CABLE

BT 072 1 FABRICATE WIRE ROPE SLING WITH THIMBLE. INCLUDES S
EIZINGS, CUTTING WIRE ROPE TO LENGTH AND INSTALLIN

BT 073 1 POUR SOCKET
2 TEST SOCKET

BT 074 1 CUT WIRE ROPE TO LENGTH WITH CABLE SHEARS
2 REMOVE OLD SOCKET FROM CABLE
3 POUR SOCKET (UP TO 1 1/2")
4 TEST SOCKET

BT 075 1 POUR SOCKET
2 TEST SOCKET

BT 076 1 MAKE SHORT SPLICE WITH NYLON ROPE

BT 077 1 FABRICATE SIMPLE SLING USING STANDARD 6-STRAND WIR
E ROPE SPLICES AND TAG
2 APPLY SERVING TO SPLICE

BT 078 1 MAKE SHORT SPLICE WITH MANILA ROPE

BT 079 1 MAKE SHORT SPLICE WITH MANILA ROPE

BT 080 1 MAKE SHORT SPLICE WITH NYLON ROPE

BT 097 1 ATTACH WITH SLINGS AND HOOKS TO 4 PADEYES ON CAMEL
2 RAISE CAMEL, LOWER, POSITION AND SET ON FORKLIFTS
AND RELEASE
3 PROCESS TIME, POSITION FORKLIFTS TO RECEIVE CAMEL

BT 104 1 POSITION CRANE
2 ATTACH AND RELEASE SLING
3 RAISE, POSITION AND RELEASE LOAD
4 ADDITIONAL CRANE TRAVEL

BT 111 1 POSITION CRANE
2 ATTACH AND REMOVE SLING
3 RAISE, POSITION AND RELEASE LOAD
4 ADDITIONAL CRANE TRAVEL

BT 113 1 POSITION CRANE AT CONCRETE BLOCK
2 POSITION LOWBED TRUCK AT CONCRETE BLOCK
3 ATTACH SLING TO CRANE HOOK
4 ATTACH AND DETACH SLING TO CONCRETE BLOCK
5 RAISE AND POSITION CONCRETE BLOCK ON LOWBED TRUCK
6 POSITION CRANE AT TARGET AREA
7 POSITION LOWBED TRUCK AT TARGET AREA
8 ATTACH AND DETACH SLING TO CONCRETE BLOCK
9 SET CONCRETE BLOCK IN EXACT LOCATION

BT 114 1 POSITION CRANE AT STEEL ARTILLERY TARGET
2 ATTACH SLING TO TARGET
3 RAISE TARGET
4 POSITION CRANE AND TARGET AT CONCRETE BLOCK
5 SET TARGET IN EXACT LOCATION

BT 116 1 REEVE YARD DERRICK SECTION CABLES
2 UNREEVE YARD DERRICK SECTION CABLES

BT 117 1 CUT CABLE TO LENGTH
2 ASSEMBLE SWAGE CLAMP TO CABLE
3 SET SWAGE DIE IN PRESS
4 SET SWAGE CABLE IN PRESS

BT 135 1 CLIMB TOWER TO DISK LOCATION LEVEL
2 RAISE AND LOWER TOOL BAG AND MATERIALS
3 CONNECT CHAIN FALL TO TOWER BAR AND DISCONNECT
4 REEVE WINCH CABLE THROUGH CHAIN FALL
5 PULL CATWALK, LUGALL JACK, JIB POLE TO DISK LOCATION WITH WINCH (120 FT); 720 FT TOTAL
6 SECURE CATWALK TO TOWER
7 SECURE JIB POLE AND JACK TO TOWER
8 HOIST TRANSMITTER DISK TO POSITION; 720 FEET TOTAL
9 SECURE DISK TO TOWER

BT 136 1 POSITION CRANE NEAR TOWER
2 CLIMB TOWER SECTION
3 RAISE AND LOWER TOOL BAG
4 RAISE BOOM TO SECTION
5 ATTACH SLINGS TO TOWER SECTION
6 DISASSEMBLE SECTION BOLTS
7 LOWER SECTION TO GROUND

BT 137 1 POSITION CRANE NEAR TOWER
2 POSITION WINCH TRUCK NEAR TOWER SECTION
3 ATTACH WINCH CABLE TO TOWER SECTION
4 ATTACH SLING TO TOWER SECTION
5 CLIMB TOWER SECTION
6 RAISE AND LOWER TOOL BAG
7 RAISE TOWER SECTION (30 FT AVERAGE SECTION)
8 ASSEMBLE SECTION BOLTS

BT 138 1 POSITION CRANE AT LOAD AND UNLOAD POINTS
2 POSITION LOWBED TRUCK AT LOAD AND UNLOAD POINTS
3 WALK THROUGH BUILDING UP TO ROOF AND RETURN
4 SLING AND UNSLING HVAC UNIT AT LOAD AND UNLOAD POINTS
5 RAISE, POSITION, AND RELEASE UNIT

BT 139 1 POSITION CRANE
2 CLIMB UP AND DOWN POLE
3 SLING AND UNSLING TRANSFORMERS
4 RAISE, POSITION AND RELEASE LOAD

BT 140 1 POSITION CRANE (DOES NOT INCLUDE MOVING CRANE BY TUGBOAT)
2 ATTACH AND REMOVE SLINGS TO A LOAD OF STEEL AND A LOAD OF DUNNAGE
3 RAISE, POSITION AND RELEASE LOAD
4 POSITION DUNNAGE UNDER LOAD

BT 141 1 POSITION CRANE
2 WALK THROUGH BUILDING UP TO ROOF AND RETURN (200 PACES, 2 MEN)
3 RIG CHAIN FALL AND HOIST TO OVERHEAD BEAM AND REMOVE
4 INSTALL OR REMOVE RETAINING SCREWS
5 SLING AND HOIST FILTER
6 MOVE FILTER TO CRANE SLING (20 PACES)
7 SLING FILTER TO CRANE (TRANSFER FROM HOIST TO CRANE)
8 RAISE AND HOIST FILTER, LOWER TO GROUND (OPERATOR, SIGNALMAN, AND RIGGER)

BT 143 1 POSITION CRANE
2 LASH OR UNLASH LOAD, CHAIN AND BINDER
3 ATTACH AND REMOVE SLINGS
4 RAISE, POSITION AND RELEASE LOAD

BT 146 1 POSITION CRANE (DOES NOT INCLUDE MANEUVERING OF CRANE BY TUGBOAT)
2 ATTACH AND REMOVE SLING FROM TANK
3 RAISE, POSITION AND RELEASE LOAD

BT 149 1 POSITION CRANE (DOES NOT INCLUDE MANEUVERING OF CRANE BY TUGBOAT)
2 ATTACH AND REMOVE SLING TO CRANE CAB TWICE; AND TO EACH DIESEL ENGINE ONCE
3 RAISE, POSITION AND RELEASE LOADS

BT 159 1 POSITION CRANE NEAR YARD DERRICK
2 RAISE AND LOWER BOOM
3 HOOK AND UNHOOK STEEL FENDER
4 HOLD FENDER FOR CUTTING (PROCESS TIME)
5 LIFT AND ASIDE FENDER TO YARD

BT 160 1 POSITION CRANE NEAR YARD DERRICK
2 RAISE AND LOWER BOOM
3 HOOK AND UNHOOK RUBBER FENDER
4 HOLD FENDER FOR BOLT REMOVAL
5 LIFT AND ASIDE FENDER TO YARD
6 HOLD NEW FENDER IN PLACE FOR DRILLING BOLT HOLES
7 HOLD FENDER IN PLACE FOR BOLT INSTALLATION

BT 161 1 POSITION LOAD
2 POSITION FLATBED TRAILER
3 ATTACH OR REMOVE CRANE HOOK
4 RAISE, POSITION AND RELEASE LOAD
5 LASH OR UNLASH LOAD TO TRAILER (AVERAGE LOAD 3 ITE
MS)

BT 162 1 LOAD AND UNLOAD BOW OR STERN FENDER AT STORAGE YAR
D

BT 163 1 POSITION CRANE
2 ATTACH OR REMOVE CRANE HOOK
3 RAISE, POSITION AND RELEASE LOAD
4 TRANSPORT FENDER WITH FORK LIFT
5 POSITION FORKLIFT

BT 164 1 POSITION CRANE
2 INSTALL OR REMOVE SHACKLES
3 INSTALL OR REMOVE SHACKLE BOLTS
4 ATTACH OR REMOVE CRANE HOOK
5 RAISE, POSITION AND RELEASE LOAD
6 POSITION FLATBED TRAILER
7 LASH OR UNLASH LOAD TO TRAILER (AVERAGE LOAD 3 ITE
MS)

BT 166 1 POSITION CRANE
2 POSITION FORK TRUCK
3 RAISE, POSITION AND RELEASE LOADS
4 ATTACH AND REMOVE SLING

BT 167 1 POSITION CRANE
2 INSTALL OR REMOVE SHACKLES
3 INSTALL OR REMOVE SHACKLE BOLTS
4 ATTACH OR REMOVE CRANE HOOK
5 RAISE, POSITION AND RELEASE LOADS
6 LASH OR UNLASH LOAD TO TRAILER (AVERAGE LOAD 3 ITE
MS)
7 POSITION FLATBED TRAILER

BT 168 1 POSITION CRANE
2 ATTACH AND REMOVE SLING
3 RAISE, POSITION AND RELEASE LOAD

BT 170 1 POSITION CRANE
2 ATTACH AND REMOVE SLING
3 RAISE, POSITION AND RELEASE LOAD
4 ADDITIONAL CRANE TRAVEL
5 ADDITIONAL CRANE TRAVEL (FIRST TRAVEL ALREADY ALLO
WED)

BT 173 1 ROLL SCAFFOLDING INTO PLACE
2 LOCK SCAFFOLD WHEELS
3 CLAMP 4 CROSS BARS AND 4 CROSS BRACES INTO PLACE
4 MOVE SCAFFOLD BOARDS INTO PLACE

BT 174 1 ASSEMBLE OR DISASSEMBLE GROUND LEVEL SECTIONS OF PORTABLE SCAFFOLDING
2 MOVE UPPER LEVEL SCAFFOLD SECTION TO FIRST LEVEL SECTION
3 INSTALL SECTION POSTS NEXT LEVEL TO SEAT IN LOWER LEVEL SECTION
4 RAISE SCAFFOLD BOARDS TO NEXT LEVEL
5 CLAMP 4 CROSS BARS AND 4 CROSS BRACES INTO PLACE FOR EACH UPPER LEVEL SECTION
6 MOVE SCAFFOLD BOARDS TO SCAFFOLD AND SET IN PLACE FOR UPPER LEVEL SECTIONS

BT 175 1 ROLL POWERED SCAFFOLD INTO PLACE
2 SET 4 JACKSTANDS INTO PLACE
3 CONNECT 2 SIDE OUTRIGGER RODS
4 CRANK JACKSTANDS TO LEVEL SCAFFOLD
5 RAISE POWERED SCAFFOLD TO EXACT HEIGHT
6 LOWER POWER SCAFFOLD TO BOTTOM LEVEL
7 RAISE JACKSTANDS

BT 176 1 POSITION AND INSTALL END FRAMES FOR GROUND LEVEL SECTIONS (FIRST GROUND LEVEL SECTION REQUIRES ONE ADDITIONAL END FRAME)
2 POSITION AND INSTALL END FRAMES FOR GROUND LEVEL SECTIONS
3 INSTALL CROSS BARS FOR GROUND LEVEL SECTIONS
4 INSTALL CROSS BARS FOR GROUND LEVEL SECTIONS (FIRST GROUND LEVEL SECTION REQUIRES 2 ADDITIONAL CROSS BARS)
5 INSTALL CROSS BRACES FOR GROUND LEVEL SECTIONS
6 MOVE SCAFFOLD BOARDS INTO PLACE FOR GROUND LEVEL SECTIONS
7 POSITION SHIM
8 LEVEL, TAP WITH HAMMER TO ALIGN

BT 177 1 ASSEMBLE GROUND LEVEL SECTIONS OF SCAFFOLDING
2 POSITION AND INSTALL END FRAMES FOR UPPER LEVEL SECTIONS
3 POSITION AND INSTALL END FRAMES FOR UPPER LEVEL SECTIONS (FIRST UPPER LEVEL SECTION REQUIRES TWO ADDITIONAL END FRAMES)
4 INSTALL CROSS BARS FOR UPPER LEVEL SECTIONS
5 INSTALL CROSS BARS FOR UPPER LEVEL SECTIONS (FIRST UPPER LEVEL SECTION REQUIRES TWO ADDITIONAL CROSS BARS)
6 INSTALL CROSS BRACES FOR UPPER LEVEL SECTIONS
7 MOVE SCAFFOLD BOARDS INTO PLACE FOR UPPER LEVEL SECTIONS (EXTRA MATERIAL HANDLING FOR INCREASED HEIGHT)

BT 178 1 ASSEMBLE GROUND LEVEL SECTIONS OF SCAFFOLDING
2 POSITION AND INSTALL END FRAMES FOR UPPER LEVEL SECTIONS
3 POSITION AND INSTALL END FRAMES FOR UPPER LEVEL SECTIONS (FIRST UPPER LEVEL SECTION AT EACH LEVEL RE
4 INSTALL CROSS BARS FOR UPPER LEVEL SECTIONS
5 INSTALL CROSS BARS FOR UPPER LEVEL SECTIONS (FIRST UPPER LEVEL SECTION AT EACH LEVEL REQUIRES TWO AD
6 INSTALL CROSS BRACES FOR UPPER LEVEL SECTIONS
7 MOVE SCAFFOLD BOARDS INTO PLACE FOR UPPER LEVELS

BT 179 1 ASSEMBLE GROUND LEVEL SECTIONS OF SCAFFOLDING
2 POSITION AND INSTALL END FRAMES FOR UPPER LEVEL SECTIONS
3 POSITION AND INSTALL END FRAMES FOR UPPER LEVEL SECTIONS (FIRST UPPER LEVEL SECTION AT EACH REQUIRES
4 INSTALL CROSS BARS FOR UPPER LEVEL SECTIONS
5 INSTALL CROSS BARS FOR UPPER LEVEL SECTIONS (FIRST UPPER LEVEL SECTION AT EACH LEVEL REQUIRES TWO AD
6 INSTALL CROSS BRACES FOR UPPER LEVEL SECTIONS
7 MOVE SCAFFOLD BOARDS INTO PLACE FOR UPPER LEVELS

BT 180 1 ASSEMBLE GROUND LEVEL SECTIONS OF SCAFFOLDING
2 POSITION AND INSTALL END FRAMES FOR UPPER LEVEL SECTIONS
3 POSITION AND INSTALL END FRAMES FOR UPPER LEVEL SECTIONS (FIRST UPPER LEVEL SECTION AT EACH LEVEL RE
4 INSTALL CROSS BARS FOR UPPER LEVEL SECTIONS
5 INSTALL CROSS BARS FOR UPPER LEVEL SECTIONS (FIRST UPPER LEVEL SECTION AT EACH LEVEL REQUIRES TWO AD
6 INSTALLCROSS BRACES FOR UPPER LEVEL SECTIONS
7 MOVE SCAFFOLD BOARDS INTO PLACE FOR UPPER LEVELS

BT 181 1 ASSEMBLE OR DISASSEMBLE GROUND LEVEL SECTIONS OF P
ORTABLE SCAFFOLDING
2 MOVE UPPER LEVEL SCAFFOLD SECTION TO FIRST LEVEL S
ECTION
3 INSTALL SECTION POSTS NEXT LEVEL TO SEAT IN LOWER
LEVEL SECTION FOR EACH UPPER LEVEL SECTION
4 RAISE SCAFFOLD BOARDS TO NEXT LEVEL
5 CLAMP 4 CROSS BARS AND 4 CROSS BRACES INTO PLACE F
OR EACH UPPER LEVEL SECTION
6 MOVE SCAFFOLD BOARDS TO SCAFFOLD AND SET IN PLACE
FOR UPPER LEVEL SECTIONS

BT 182 1 ASSEMBLE OR DISASSEMBLE GROUND LEVEL SECTIONS OF P
ORTABLE SCAFFOLDING
2 MOVE UPPER LEVEL SCAFFOLD SECTION TO FIRST LEVEL S
ECTION
3 INSTALL SECTION POSTS NEXT LEVEL TO SEAT IN LOWER
LEVEL SECTION FOR EACH UPPER LEVEL SECTION
4 RAISE SCAFFOLD BOARDS TO NEXT LEVEL
5 CLAMP 4 CROSS BARS AND 4 CROSS BRACES INTO PLACE F
OR EACH UPPER LEVEL SECTION
6 MOVE SCAFFOLD BOARDS TO SCAFFOLD AND SET IN PLACE
FOR UPPER LEVEL SECTIONS

BT 183 1 ASSEMBLE OR DISASSEMBLE GROUND LEVEL SECTIONS OF PORTABLE SCAFFOLDING
2 MOVE UPPER LEVEL SCAFFOLD SECTION TO FIRST LEVEL SECTION
3 INSTALL SECTION POSTS NEXT LEVEL TO SEAT IN LOWER LEVEL SECTION FOR EACH UPPER LEVEL SECTION
4 RAISE SCAFFOLD BOARDS TO NEXT LEVEL
5 CLAMP 4 CROSS BARS AND 4 CROSS BRACES INTO PLACE FOR EACH UPPER LEVEL SECTION
6 MOVE SCAFFOLD BOARDS TO SCAFFOLD AND SET IN PLACE FOR UPPER LEVEL SECTIONS

BT 184 1 GATHER SCAFFOLDING PARTS AND REPOSITION INSIDE WORK AREA *PARTS INCLUDE END FRAMES, DIAGONAL BRACES,
2 WALKING REQUIRED TO GATHER/REPOSITION PARTS *APPROX. NUMBER OF ROUND TRIPS TIMES NUMBER FEET *(5 R.
3 WALKING REQUIRED TO GET/INSTALL EACH SCAFFOLDING PART *TO GET/POSITION END FRAMES (18 FT X 2 PARTS)*
4 OBTAIN AND POSITION EACH "END FRAME", "DIAGONAL BRACE" (PREPARATORY TO "SNAP ON"), AND PLATFORM *(2
5 APPLY PRESSURE TO "SNAP ON" "DIAGONAL BRACE" ON TO "END FRAME" *8 "SNAP ON"

BT 185 1 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PREFABRICATED SCAFFOLDING AT GROUND LEVEL (THIS SEGMENT OF
2 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PREFABRICATED PIPE SCAFFOLDING TWO LEVELS HIGH (GROUND LEVEL
3 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PREFABRICATED PIPE SCAFFOLD 3 LEVELS HIGH (TO ESTABLISH A
4 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PREFABRICATED PIPE SCAFFOLDING 4 LEVELS HIGH (TO ESTABLISH
5 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PREFABRICATED PIPE SCAFFOLDING 5 LEVELS HIGH (TO ESTABLISH

BT 186 1 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PORTABLE SCAFFOLDING AT GROUND LEVEL (THIS SEGMENT OF ASS
2 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PORTABLE SCAFFOLDING TWO LEVELS HIGH (GROUND LEVEL SHOWS
3 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PORTABLE SCAFFOLD 3 LEVELS HIGH (TO ESTABLISH A FORMULA G
4 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PORTABLE SCAFFOLDING 4 LEVELS HIGH (TO ESTABLISH FORMULA
5 ASSEMBLE OR DISASSEMBLE 5X6 FT SECTIONS OF PORTABLE SCAFFOLDING 5 LEVELS HIGH (TO ESTABLISH A FORMUL

BT 200 1 LOWER AND RAISE NECK *REFERENCE: FOLDING GOOSENECK MODEL KFG-50T *MANUFACTURED BY KALYN INCORPORATED
2 DRIVING REQUIRED TO ATTACH AND DETACH TRACTOR TRAILER
3 DRIVE BULLDOZER (OR SIMILAR) ONTO LOWERED PLATFORM
4 WALKING REQUIRED *APPROX. 250 FT

BT 201 1 LOWER AND RAISE PLATFORM *REFERENCE: FOLDING GOOSE
NECK MODEL KFG-50T *MANUFACTURED BY KALYN INCORPOR
2 DRIVING REQUIRED TO ATTACH AND DETACH TRACTOR TRAI
LER *DONE TWICE FOR UNLOADING AND LOADING EQUIPMEN
3 DRIVE BULLDOZER (OR OTHER HEAVY EQUIPMENT) ON/OFF
LOWERED PLATFORM *DONE TWICE FOR LOADING AND UNLOA
4 WALKING REQUIRED *APPROX. 400 FT *DONE TWICE FOR U
NLOADING AND LOADING*400*2
5 TIE AND UNTIE HEAVY EQUIPMENT *TWICE TIE, AND TWIC
E UNTIE

BT 202 1 POSITION CHAIN ON BARRIER *POSITIONED TWICE
2 SECURE CHAINS TO BARRIER *SECURED TWICE
3 LIFT, TURN BACKHOE, AND PLACE BARRIER
4 TAKE OFF CHAINS *DONE TWICE
5 WALKING REQUIRED•